

The Risk of Domestic Violence and Women with HIV Infection: Implications for Partner Notification, Public Policy, and the Law

ABSTRACT

Partner notification has emerged as an important strategy in the fight against acquired immunodeficiency syndrome (AIDS), and states have now adopted a plethora of laws that encourage or mandate notification, often without the patient's consent. As human immunodeficiency virus (HIV) infection continues to spread among women, the future development of AIDS control strategies and public health laws must be shaped by concern for the safety and autonomy of patients who face a risk of domestic violence. Three distinct recommendations flow from this premise. First, all HIV-infected women should be assessed for the risk of domestic violence and offered appropriate interventions. Second, where a risk of abuse is indicated, partners should never be notified without the patient's consent. State laws that presently permit involuntary notification should be repealed or amended. Third, laws that punish a patient's refusal to notify partners should also be modified or repealed. (*Am J Public Health*. 1995;85:1569-1576)

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Introduction

The rapid spread of human immunodeficiency virus (HIV) infection among women has begun to transform both public health policy and clinical practice. The Centers for Disease Control and Prevention (CDC) report that women now constitute the fastest-growing group of persons with acquired immunodeficiency syndrome (AIDS) in the United States.¹ From July 1993 to June 1994, women accounted for 17% of reported AIDS cases.² The proportional figure for HIV infection is substantially higher: as of June 1994, nearly one quarter of all new cases were in women.

This shift in the demographics of AIDS has been accompanied by a growing recognition that the clinical manifestation and outcomes of the disease in women and men may be different.^{3,4} A large prospective study conducted by Terry Bein Community Programs for Clinical Research on AIDS recently found that HIV-infected women face an increased risk of death when compared with men; during a 15-month period of observation, women had a significantly lower rate of survival even though disease progression rates did not differ significantly by sex.⁵ The authors of the study suggest that the reasons for excess mortality in HIV-infected women "might include lower socioeconomic status, homelessness, domestic violence, substance abuse, and the lack of social support."^{5(p 1920)}

At present, there are few empirical data to support or refute their hypothesis. The distinctive social and psychological consequences of HIV infection among women have not yet received much attention.⁶ This absence of important data on the lives of HIV-infected women reflects a larger, more pervasive problem: both empirical research and public health policy have placed a disproportionate emphasis on questions relating to vertical transmission from mother to child.³ The recent push for testing of all pregnant

women is but the latest manifestation of this focus.*

Yet, in other respects, AIDS policy has generally assumed that women need not be treated differently than men. This is especially true for the issue of partner notification, in which gender differences have not been addressed. Over the past decade, partner notification has emerged as a major public health strategy in the fight against AIDS. There is broad consensus that partner notification efforts, including contact tracing programs, should be used to protect all persons at risk for HIV infection.⁸⁻¹³ But can such efforts be effective when the HIV-infected patient is a woman who fears domestic violence and the partner to be notified is the man she fears? The possibility that HIV-infected women may fear or experience domestic violence cannot be ignored. The intersection of the AIDS epidemic with the reality of domestic violence has broad policy, legal, and ethical implications that require a reexamination of current public health strategies.

*On February 23, 1995, the US Public Health Service issued draft recommendations that urge testing of all pregnant women in the United States. A few commentators have argued that the guidelines do not "go far enough" and that testing should be mandatory for all pregnant women.⁷ The Newborn Infant HIV Notification Act (HR 1289) proposes to unblind the HIV Survey of Childbearing Women and therefore make its results available to the legal parents and guardians of infants who test positive in an HIV antibody test conducted shortly after birth. Unblinding this survey is tantamount to mandating the testing of childbearing women for HIV without their consent.

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HIV-Infected Women and the Prevalence of Domestic Violence

"Andre did some pretty mean things to me. He hit me. He kicked me. And he gave me HIV."

Ellen G.¹⁴

Researchers estimate that approximately 3 to 4 million women in the United States are severely assaulted by a spouse or partner each year.¹⁵ A recent study of female emergency department patients found that 54% of women had been assaulted, threatened, or made to feel afraid by male partners at some time in their lives.¹⁶ According to the Uniform Crime Report of the Federal Bureau of Investigation, at least 30% of women killed in the United States die at the hands of a current or former partner.¹⁷ Among women who have been battered once, 75% will be battered again by the same partner.¹⁸ A 5-year follow-up study found that previously battered women were admitted to a hospital, on average, four times more often than women in a control group, and that severe depression, suicide, and substance use were all strongly associated with prior abuse.¹⁹

Additional studies have established that for women at risk for battering, pregnancy is a high-risk period in which they face a greater likelihood of injury and adverse health consequences. In fact, 25% to 63% of women who have been battered experience abuse during pregnancy, with blows to the abdomen, injuries to the breast and genitals, and sexual assault.^{20,21} One recent study, conducted among poor urban women who received public prenatal care, found that 22% of teenage women and 16% of adult women were abused during pregnancy.²² In another study, it was reported that, even when controlling for socioeconomic factors and prior history of violence, a pregnant woman's risk of being battered was associated with her use of alcohol during pregnancy and her partner's use of illicit drugs.²³

Some researchers have begun to raise broad concerns about the risk of domestic violence against those women who are most likely to be diagnosed with AIDS or HIV infection. More and more women first learn of their infection when they are tested for HIV during pregnancy. The women at highest risk for infection—those who use intravenous drugs or crack cocaine—may also face an increased risk of domestic violence.²⁴ A study conducted among HIV-infected, injection drug-using women, for example, found high

levels of depression and prior physical abuse.⁶ Many of the women also reported that they lacked strong systems of social support. As noted earlier, the authors of the Terry Beirn study suggest that the reasons for excess mortality in HIV-infected women may include such factors as domestic violence.⁵ Nonetheless, we know of no published data reporting the prevalence of abuse among HIV-infected women,* nor do we know to what extent, if any, partner notification may contribute to the severity and frequency of domestic violence.**

In fact, we recognize that it is unclear what precipitates abuse and whether a positive HIV test is a significant factor. There may be numerous factors that lead men to batter women. We do not know whether partner notification presents a unique or special trigger for battering. We also recognize that the experience of domestic violence is not unique to women in heterosexual relationships. Still, we believe that HIV-infected women are particularly vulnerable to the risk of domestic violence.

A recently published study by the authors and their colleagues at the University of Maryland at Baltimore surveyed 136 medical and mental health professionals who treat or counsel HIV-infected women in Baltimore.²⁷ Forty-five percent of all providers surveyed had at least one female patient who expressed fear of physical violence resulting from disclosure of her diagnosis to a partner, while 56% of providers had patients who expressed fear of emotional abuse and 66% had patients who expressed fear of abandonment. Among providers who encountered these fears, the fears were expressed by 18%, 29%, and 35% of their female patients, respectively. There is also reason to believe that these figures may understate the actual prevalence of fear among female patients: one study, conducted in three internal medicine clinics, found that two thirds of abused women who sought medical care unrelated to their abuse did not discuss the abuse with a health care professional.²⁸

Health care professionals in our Baltimore survey dramatically underscored the intensity of the violence and abuse with narrative descriptions of the harms their patients experienced after disclosure. Patients were kicked, beaten, shot, and raped and suffered knife wounds to the face. One patient broke both legs after jumping from a third-floor window to escape being shot. The incidents of emotional abuse ranged from partners

spitting on patients to threats of violence and death against both the women and their children. Some of these incidents occurred in the presence of providers: in one case, hospital security personnel were forced to remove a violent partner. Patients were commonly rejected, ostracized, and abandoned by family, friends, and partners. One woman returned home to find her belongings in the street, while others lost access to their children.

Until more rigorous research is forthcoming, both practitioners and policymakers must assume that the problem of domestic violence is at least as severe among HIV-infected women as it is among women in general. Thus, any link between domestic violence and partner notification has serious personal and public health implications. The potential for violence, abuse, and abandonment must be recognized when implementing public health policy and devising protocols for the treatment of women infected with HIV.

Policy Considerations

Over the past decade, various strategies for partner notification have been among the most frequently discussed topics in the literature on AIDS and public policy. Unfortunately, the widespread use of the term *partner notification* has obscured important differences in the way notification is carried out.⁸ Partners may be notified by the patient ("patient referral") or by a health care professional ("provider referral"). The latter strategies include notification by health department personnel ("contact tracing"). In most states, physicians have a legal "privilege to disclose" and may notify known partners without the patient's consent. Despite 50 years of experience with partner notification in the context of syphilis, however, there is a severe shortage of empirical

*For an abstract of recent research, see Shannon et al. (1995),²⁵ who surveyed 114 pregnant women and found that among 90 who were infected with HIV, 24% reported abuse during their current pregnancy and 37% had been subjected to violence from their current partners. Twenty-six of the HIV-infected women admitted using injection drugs, and the authors found that among women with HIV, those who used injection drugs were more likely to experience violence than those who did not.

**For an abstract of recent research, see Geilen et al. (1995),²⁶ who conducted in-depth, open-ended interviews with 50 HIV-infected women, 6% of whom reported that a partner responded with violence when notified of her seropositive status.

data comparing the relative effectiveness of alternative partner notification strategies.²⁹

Barriers to Cooperation with Partner Notification Efforts

Commentators and public health officials have long recognized that the success of partner notification efforts depends heavily on the voluntary cooperation of the infected patient. Yet patient resistance to partner notification is well documented with respect to both contact tracing programs and patient referral strategies.³⁰⁻³² In the context of a crack-related syphilis epidemic, researchers have recently concluded that traditional contact tracing strategies are not effective because patients are either unwilling or unable to identify partners.³³ Control of HIV among injection drug users may suffer from similar problems. Yet despite the widespread knowledge of patient resistance to partner notification efforts, researchers have not isolated the sources of patient resistance or assessed their relative importance, particularly among female patients.

The data from a North Carolina study of partner notification illustrate the lack of patient cooperation with both contact tracing and patient referral efforts.³⁴ Between 1988 and 1990, HIV-infected patients were recruited from testing programs at three county health departments. Despite assurances of confidentiality, more than half the eligible patients declined to participate in the study. Those who did participate were divided into patient referral and contact tracing groups. Among the patient referral group, only 7% of partners were notified even though counselors were available to provide role-playing exercises and other support designed to encourage disclosure. There was also strong evidence of a lack of cooperation among patients enrolled in the contact tracing group. One half of the partners identified by that group could not be notified because of limited or incorrect information, and the researchers conceded that efforts to locate partners were probably hampered by the index patient's unwillingness to provide accurate information.

The utility of studies such as this one in the context of HIV-infected women may be limited: the research to date has been conducted almost exclusively among populations of gay or bisexual men. We know of no research that examines patient resistance primarily among populations of infected women, nor do we know of data

that compare any differences in patient resistance by sex. Nonetheless, the available data indicate the need to consider carefully the potential barriers to patient cooperation.

The data from our Baltimore survey of health care professionals who treat or counsel HIV-infected women suggest that some HIV-infected women may resist notification because they fear domestic violence, emotional abuse, or abandonment.²⁷ More than half the providers responding to the survey reported that one or more of their female patients actively resisted notification. This subgroup of providers was asked to rank 10 specific reasons why female patients might resist, including fear of stigmatization, loss of employment, or loss of health insurance. The providers ranked fear of abandonment, physical violence, emotional abuse, and loss of emotional support as the four most important reasons. Viewed collectively, these fears all involve the disruption of the patient's relationships with partners, family, and friends—the network of support that can be so essential to a person infected with HIV.

To the extent that commentators have considered patient resistance, the focus has been on issues of privacy, discrimination, and social ostracism. Some proponents of partner notification rely heavily on the premise that the concerns of HIV-infected people do not justify greater protection for the confidentiality of the patient's diagnosis.^{35,36} For example, it has been argued that the social and epidemiological problems posed by HIV infection must be addressed simultaneously but separately,¹⁰ and that concerns about discrimination should be remedied with stronger antidiscrimination laws rather than with changes in traditional disease control strategies. Unfortunately, these commentators have not considered the risk of domestic violence against HIV-infected women.

We agree that strong antidiscrimination laws and other measures aimed at the social consequences of HIV are essential. In theory, the law can provide an effective remedy for many forms of discrimination. An employer who fires an HIV-infected employee, for example, can be compelled to reinstate that employee and pay back wages. In reality, however, the effectiveness of such laws may be limited by practical considerations, including a patient's willingness to go public with his or her HIV status and to commit precious time and resources to a lawsuit. And even more to the point, the law may be largely

powerless to provide a meaningful remedy for physical violence, emotional abuse, and other important threats to the well-being of HIV-infected women. At best, the law can only help to ensure that future abuse is prevented. Thus, HIV-infected women cannot be protected against the risk of domestic violence without changes in both public health policy and laws pertaining to partner notification. Similarly, neither women nor men can be protected from ostracism and abandonment. Despite a decade of AIDS-related educational efforts, fear of HIV-infected persons and stigmatizing attitudes continue to be pervasive.³⁷

In light of the risk that partner notification may trigger episodes of violence, abuse, and abandonment, public health officials must reaffirm their commitment to partner notification that is both voluntary and confidential. Unfortunately, we know of no data that demonstrate how well the goal of confidentiality actually is achieved in practice. While it is essential to protect the patient's identity, public health personnel must recognize that even their most vigilant efforts to do so may not ensure the safety of battered women. Many partners, once notified of their potential exposure to HIV, can undoubtedly produce a very short list of suspected sources without the assistance of health department personnel. Even in cases in which the patient's identity has been protected, the act of notification may serve as a trigger for further abuse: an abusive man who is notified may blame his current partner and lash out against her, without stopping to assess whether she is truly the source of his risk.

These serious considerations suggest that patient consent to notification is crucial. Historically, contact tracing programs have relied on the patient's consent and cooperation,⁸ but the public health commitment to voluntary notification has sometimes faltered. Although contact tracing generally cannot be carried out unless the patient provides the names of partners, involuntary notification may often be possible. In a 1990 article on the importance of protecting patient confidentiality, CDC staff and other public health commentators suggested that a typical cohort of 100 infected persons may include 50 spouses or other partners who can be notified "without the index patient's cooperation."³⁸ CDC guidelines state that health department personnel should notify known partners whenever an HIV-infected patient is unwilling to do so.^{12,39} These CDC recommendations,

however, do not consider the risk of violence against HIV-infected women. In cases in which the patient is a woman who fears domestic violence, involuntary notification is both dangerous and irresponsible.

The Standard of Care for the Assessment of Domestic Violence and Intervention

For more than a decade, commentators, professional organizations, and advocates for women have urged that medical professionals take a more active role in responding to the epidemic of domestic violence.^{15,40-44} For example, emergency room standards promulgated by the Joint Committee on the Accreditation of Health Care Organizations have highlighted the need for assessment and medical intervention in cases of domestic abuse.⁴⁵ Unfortunately, many physicians still fail to respond to evidence of domestic violence, even when they know the underlying cause of the trauma.⁴⁶ The reasons for this failure are complex. An ethnographic study of 38 physicians revealed that many perceived intervention as analogous to "opening Pandora's box."⁴⁷ The concerns most often expressed by those physicians include time constraints and fear of offending patients. Roughly half the physicians involved voiced frustration with their inability to "fix" the problem, and many felt that their efforts at intervention would be useless unless the patient was motivated to change.

The widespread failure to assess for domestic violence also has institutional roots. In a retrospective study of one emergency department with a protocol for assessment of domestic violence, researchers found the protocol not being followed in 92% of cases involving abuse.⁴⁸ At another site where earlier research on domestic violence had been conducted,⁴⁹ researchers found that protocols for assessment were no longer being used and that the percentage of patients identified as abuse victims had thus fallen from 30% to 8%. Despite the attention paid to domestic violence over the last decade, similar low rates of detection and documentation continue to be reported.¹⁶

According to the American Medical Association's Council on Ethical and Judicial Affairs, the ethical principles of beneficence and nonmaleficence (do no harm) require that physicians diagnose and respond to domestic violence.^{50,51} More specifically, physicians should question patients about domestic violence, provide support, address patient safety,

document abuse, provide information about resources, and offer referrals. Although the American Medical Association (AMA) states that its guidelines regarding domestic violence "are not intended to be construed as a standard of care,"^{52(p 2)} a court may conclude otherwise. For example, a battered woman with HIV who suffers physical violence after a partner is notified might allege that her physician was negligent, relying in part on the AMA guidelines to establish the appropriate standard of care. Because of the special relationship between the patient and physician, the physician may have a duty to protect the patient⁵³ and to take those steps that are reasonably necessary to reduce the risk of further abuse. At a minimum, physicians should conduct a risk assessment and make appropriate referrals available. The standard of care may also require that the physician refrain from activities—such as partner notification—that place the patient at increased risk for further abuse.

Regardless of the potential for legal liability, the need for assessment and appropriate intervention in cases of domestic violence is especially important among HIV-infected women. Fears of domestic violence threaten patient cooperation with partner notification strategies, while partner notification efforts of any type may threaten the safety of battered women. Taken together, those considerations suggest that assessment and appropriate interventions should not be limited to cases in which provider referral is being considered; instead, they should be standard practice in the treatment of all HIV-infected women, including those treated in a public health setting.^{54,55}

Clinical assessment screens are an effective means of identifying patients who face a risk of abuse.²¹ If the patient expresses a fear of violence, the provider must presume that the risk is real and substantial unless there is reliable evidence to the contrary. When such a risk is indicated, the provider should offer referral to appropriate community resources and the partners should not be notified until there are assurances from the patient that she is no longer at risk for domestic violence. The laws of many states require that health care professionals report certain types of injuries to a criminal justice agency. In such cases, the provider should work closely with the patient and appropriate officials to ensure that the risk of reprisal is reduced and the patient's safety needs are met.⁵⁶

Appropriate procedures for assessment and intervention in cases of domestic violence have been described in greater detail elsewhere.⁵⁷⁻⁶⁰ Here, we emphasize the importance of making these procedures available as early as possible in the treatment and counseling of HIV-infected women. A discussion of the risk of domestic violence and a brief assessment screen²² should be incorporated into pretest counseling procedures. Pre- and posttest counseling must include a warning of the social risks associated with HIV infection, including discrimination, financial and emotional abandonment, and the risk of domestic violence.* This is particularly important as the testing of most pregnant women becomes a reality.

Legal Approaches

The decade-long debate over partner notification has raised a difficult set of legal and ethical concerns, in which the interests of the patient have been pitted against public health goals and the interests of unsuspecting partners. In the early stages of the debate, the analysis of those issues was framed as an unresolved conflict between a duty to protect the confidentiality of the patient's medical information and a comparable duty to warn foreseeable victims of the risk posed by the patient's infection.⁶¹⁻⁶³ Many legal commentators have resolved those tensions in favor of notification, relying on the decision in *Tarasoff v Regents of the University of California*⁶⁴ to argue that physicians have a common-law duty to warn the partners of HIV-infected patients.^{65,66} On the other hand, attempting to apply *Tarasoff* in the context of HIV infection is exceedingly problematic.^{67,68} The *Tarasoff* court found that the psychotherapist had sufficient "control" over the circumstances to give rise to a duty to a third party who was threatened with harm. Such a duty could be discharged by warning the intended victim, notifying the police, or taking other reasonable steps under the circumstances. Some commentators, noting the absence of control, argue that the relationship between an HIV-infected patient and a treating physi-

*It is worth noting that the February 23, 1995, draft of the US Public Health Service Recommendations for HIV Counseling and Testing for Pregnant Women states that counseling "should include an assessment of the potential for negative effects resulting from their HIV infection such as possible discrimination, domestic violence, and psychological difficulties" (Recommendation 7).

cian does not give rise to the legal duty under *Tarasoff*.⁶⁹

The requirement of "foreseeability" of harm raises another problem in applying *Tarasoff* to justify a duty to warn or notify partners. The foreseeability of HIV transmission is factually complicated in each HIV case and is limited by the scientific data available. For example, one report concludes that "a single act of vaginal sex without using a condom with a partner who is known to be infected with HIV carries a one in five hundred risk of infection."⁷⁰ The use of a condom lowers the risk to 1 in 50 million.⁶⁹ The risk of female-to-male transmission of HIV is probably lower than that of male-to-female transmission.^{71,72} There are questions about the number of exposures to the virus and an increase in the risk of infection,⁷³ about increased risks if cofactors such as other sexually transmissible diseases exist,⁷⁴ and about periods when infected persons may be more contagious.⁷⁵

Despite these problems, however, state legislatures have now enacted a complex array of statutes designed to encourage or require some form of partner notification. These statutes may be classified into four broad strategies for partner notification. The first strategy is universal. All 50 states have adopted some form of contact tracing program for HIV-infected patients based on models developed in the treatment of sexually transmitted diseases.⁸ In some states, the authority to trace and contact the partners of HIV-infected patients is expressly granted by statute^{76,77}; in others, the authority is implied from a broader authority to take those steps that are necessary to protect public health.

The second strategy also relies on traditional models for the control of infectious diseases. All states require mandatory reporting of AIDS cases. In many states, physicians are also permitted, if not required, to provide the names of HIV-infected patients and known partners to state or local health officials. A total of 38 states—primarily those with a low incidence of HIV infection—now require some form of name reporting.⁶⁷ Of higher-incidence states, only New Jersey has name reporting.^{67,78}

The third strategy represents a significant departure from traditional public health models. As of 1994, a majority of states had adopted statutes based on the "privilege to disclose" approach, in which physicians are permitted to notify sexual or needle-sharing partners directly and

without the consent of the HIV-infected patient.⁷⁹ In states endorsing this strategy, a physician who notifies a known partner is immune from civil liability arising from a breach of the patient's confidentiality. (A few states, including Florida and West Virginia, have extended the privilege to disclose to other health care providers.^{80,81}) In response to recommendations promulgated by the AMA,⁸² however, at least 15 states have also declared that physicians do not have a legally enforceable duty to warn a known partner.

The privilege-to-disclose statutes vary sharply from state to state. In some states, including California,⁸³ New York,⁸⁴ and Pennsylvania,⁸⁵ the privilege is restricted by carefully worded legal conditions. For example, a physician may not notify a partner unless the physician reasonably believes that the patient's behavior presents a "significant" risk of infection. The physician must also inform the patient of his or her intent to notify the partner. Where the privilege to disclose is restricted in some way, statutes typically provide that physicians who fail to comply with the stated conditions are not immune from civil liability. In many of the states with a privilege-to-disclose statute, however, the privilege is unrestricted. Under the laws of both Ohio⁸⁶ and Maryland,⁸⁷ for example, a physician may notify a sexual partner without regard to the actual risk of transmission.

For each of these three strategies, our recommendations are the same. Regardless of whether notification is carried out by physicians, other health care providers, or public health personnel, state laws pertaining to partner notification should prohibit disclosure to the partners of HIV-infected women unless the patient is first assessed for the risk of domestic violence. (A comprehensive HIV bill introduced in the Florida legislature provided, in part, that protocols shall require consideration of "whether partner notification may result in domestic violence against the human immunodeficiency virus-infected partner."⁸⁸) In cases in which a risk for violence is indicated, the law should prohibit notification without the patient's consent, even when the women is unwilling to seek assistance from a shelter or other community resources. The law should also require, at a minimum, that providers or public health personnel offer appropriate interventions. When a patient at risk for violence consents to notification, these providers should ensure that a safety plan is developed and executed before the part-

ner is notified. In addition, notification should not be undertaken without the patient's consent when there is good reason to believe that the partner is already infected.

The fourth and final strategy centers on legislatively mandated efforts to encourage or compel patient referral without regard to the risks that patients may face. Under Maryland law, for example, patients must sign a special form for informed consent prior to HIV testing. The form cautions that if the test results are positive and the patient refuses to notify her partners, "my doctor may either notify them or have the health department do so."⁸⁹ Many states have adopted more drastic measures. In Michigan, the health department is required to instruct an HIV-infected patient "that he or she has a legal obligation to inform each of his or her sexual partners" and "may be subject to criminal sanctions for failure" to do so.⁹⁰ The Michigan law applies only to *current* sexual partners. Under Indiana law, a patient who fails to warn both *past* and *present* partners is guilty of a misdemeanor⁹¹ and may be subject to a penalty of 180 days in jail and/or a fine of \$1000.⁹² In many states, an HIV-infected patient may be subject to criminal prosecution for knowingly engaging in activity that exposes an unsuspecting partner to a risk of HIV transmission, regardless of whether transmission actually occurs.^{93,94}

Regardless of the exact approach used to "encourage" patient referral, such laws should be amended with the safety of battered women in mind. During pre- and posttest counseling, for example, HIV-infected women should be assured that their partners will not be contacted if notification presents a genuine risk for domestic violence. Moreover, the potential link between domestic violence and partner notification suggests that criminal penalties for failure to warn a partner will be ill-advised. In light of current patterns of transmission, it will often be the case that the woman's partner is already infected, and that he infected her. The woman who is afraid to notify her partner for fear of violence may also be afraid to resist demands for sexual relations and may be unable to negotiate the use of condoms. Under those circumstances, imposing a criminal penalty can serve no legitimate purpose. HIV-infected women should not face criminal prosecution for failing to notify a potentially abusive partner, even if they engage in unprotected sex with that partner.

Our recommendations leave a broader question unanswered: in cases in which there appears to be no risk for domestic violence, how should partner notification be carried out? In particular, are there situations when a partner should be notified without the patient's consent? Although the issues raised by that question are beyond the scope of this article, one point is worthy of further attention. As we noted earlier, the adoption of laws permitting physicians to notify partners directly, without the consent of the patient, represents a departure from traditional public health models for the control of infectious diseases. In a sense, such laws represent a different kind of "HIV exceptionalism"^{95,96}: physicians are generally not granted a similar privilege with regard to other infectious diseases, such as syphilis and hepatitis. As HIV infection continues to spread among women, the wisdom of the privilege-to-disclose strategy must now be reassessed.

The possibility of domestic violence against HIV-infected women suggests that the adoption of privilege-to-disclose statutes was both hasty and ill-advised. In general, laws that grant physicians immunity from civil liability should be adopted only under the most compelling circumstances and only when there are no acceptable alternatives. The same is true for legislative exceptions to the confidentiality of medical information. The reason should be obvious: unless such laws are both carefully considered and narrowly drafted, there may be serious and unintended consequences. In the case of HIV-infected women, the unintended consequences of partner notification may include violence and perhaps even death at the hands of an abusive partner. In cases in which the patient is a woman who faces a genuine risk for abuse, a physician who notifies a partner without the patient's consent should not be immune from liability. Ironically, laws mandating the reporting of domestic violence may also do more harm than good. A recent California statute, for example, requires health practitioners to report to the police when they "reasonably suspect" a patient's injuries were the result of "assaultive or abusive conduct."⁹⁷ Such mandatory reporting may threaten the health and safety of battered women, who may experience retaliatory violence, as well as violate patient autonomy and confidentiality.⁵⁶

Finally, we note that the legislative preference for contact tracing and provider referral strategies has yet to be

supported by sound empirical data. A recent overview of published research concludes that there is "little evidence" to support the judgment that one partner notification strategy is more efficient or effective than another.²⁹ The overwhelming majority of studies that purport to demonstrate the effectiveness of contact tracing in the context of HIV or syphilis do not compare this strategy with other case-finding strategies, such as inexpensive efforts to improve the effectiveness of patient referral. Moreover, the research to date has relied on indirect but easily quantified measures of "success": the number of patients tested and counseled, or the number of new cases identified.^{32,34} Among many populations of HIV-infected persons, including intravenous drug users, the available data do not support the conclusion that testing and counseling interventions are effective in changing patient behaviors.⁹⁸ Nor has available research on partner notification attempted to measure the psychosocial impact on patients or partners.

To date, health law and public policy regarding provider referral has been "based more on convictions than on data."^{29(p.546)} In light of the potential risks posed by partner notification—including violence, abuse, and abandonment—we find the absence of such data deeply disturbing. Until reliable data are forthcoming on the relative effectiveness of different partner notification methods and the potential negative consequences to the patients of such notification, the wisdom of *any* program involving mandatory or involuntary notification must be seriously challenged.

Conclusion

It is undoubtedly the case that many HIV-infected women experience domestic violence, both before and after their partners are notified. Some HIV-infected men, including gay men, may also experience violence. The problem is not confined to HIV and AIDS: similar concerns are likely to be valid for other sexually transmitted diseases whenever partner notification is used. However, the potential consequences of domestic violence in these contexts have yet to be addressed by policymakers, researchers, clinicians, or public health officials.

As HIV infection continues to spread among women, the future development of AIDS control strategies must be shaped by an overarching concern for the safety and autonomy of patients who face a risk

for abuse. Three distinct recommendations flow from this premise. First, all HIV-infected women should be assessed for the risk of domestic violence, and interventions should be offered when appropriate. Second, in cases in which a risk for abuse is indicated, partners should never be notified without the patient's consent. State laws that currently permit involuntary notification should be repealed or amended. Third, laws or programs that attempt to coerce patient referral or punish a patient's failure to notify partners should also be modified or eliminated.

None of these recommendations should be interpreted as a uniform condemnation of partner notification. In fact, the need for partner notification may be particularly important for women, who may be less likely than men to be aware that they are at risk for HIV infection. As a group, women also have greater difficulty protecting themselves against the risk of infection and may face an uphill struggle in persuading partners to use condoms. Notwithstanding these concerns, providers and policymakers must respect the autonomy of patients who fear domestic violence. To do otherwise may threaten both the safety of HIV-infected patients and the effectiveness of partner notification efforts. □

Acknowledgment

This work was funded in part by the American Foundation for AIDS Research under public policy grant #11059-14-P.

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